

### ISSUES IN THE FINANCING OF FAMILY PLANNING SERVICES IN SUB-SAHARAN AFRICA: POLICY BRIEF 4



# REDUCING COSTS AND ENHANCING EFFICIENCY

This brief discusses ways to reduce the costs of family planning services. Potential strategies include:

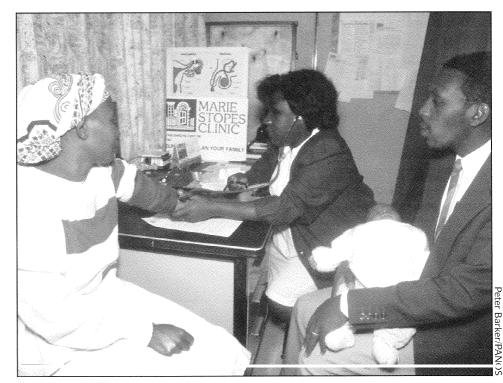
assessing and understanding the actual costs of providing services so that lower cost methods and distribution systems can be identified, with due regard for choice and access;

 using excess capacity in delivery systems;

reducing or eliminating costly regulations and unnecessary procedures; and

integrating family planning services with broader reproductive health care.

The questions that follow address these topics. While each of these strategies has the potential to reduce the costs of family planning programs, the extent of this potential is not always clear.



#### QUESTION #1:

### What do we know about the costs of family planning services?

Before one can forecast how much cost saving can be achieved through various strategies, it is important to determine the accuracy of existing family planning cost estimates. Many cost studies have been conducted in Africa, but their results are difficult to compare because of wide country variation in programs and economic conditions. We are focusing on only one country, Kenya, thereby eliminating some of the reasons for the variability in cost estimates.

Several cost studies have been conducted in Kenya in the past five years. <sup>1,2,3,4,5</sup> Table 1 shows the variation in the costs of providing a range of family planning methods, as reported in some of these studies. Using inflation and exchange rate information, we expressed all costs in 1997 U.S. dollars to make the estimates comparable.

The figures in Table 1 are reported as cost per couple year of protection (CYP). This measure estimates the cost of providing a year of pregnancy protection to a woman for each type of contraceptive method.

The costs of CYPs by method vary according to both the cost of the method chosen and the length of time that it is used. For example, since one intrauterine device (IUD) can provide years of protection, the cost of this method is spread over several years; alternatively, the cost of four injections of Depo Provera (DMPA) totals one CYP for this method, since each injection provides only three months of protection.

As illustrated in Table 1, costs per CYP were lowest for IUDs in four of the five studies reviewed. Sterilization was the lowest cost method in the fifth study and the second lowest cost method in the other four. Cost per CYP is much higher for all other methods

The costs per CYP by mode of delivery, using data from the Family Planning Association of Kenya (FPAK) as an example, indicate that clinics have lower costs than do community-based distribution (CBD) programs (\$10.09 vs. \$16.30, 11 data not shown). However, community-based distribution programs provide only re-supply methods, which have a higher cost per CYP.

Table 1 also shows that there is a great deal of variation in the estimated costs per CYP reported by or derived from different studies. It would be very difficult for policy-makers to incorporate cost considerations into method-mix planning without more consistent, reliable information. While costs are but one criteria upon which such plans are based, they do need to be considered. Programs need to understand the trade-offs in cost, service quality, access and reproductive choice.

Table 1. Average Cost per CYP by Method in Kenya (in 1997 U.S. dollars)

Study	NCPD <sup>6</sup> (1995)	Kimunya <sup>7</sup> (1996)	Musau <sup>8</sup> (1996)	Twahir et al. <sup>9</sup> (1996)	AVSC <sup>10</sup> (1994)
OCs	28.01	18.03	8.87	10.28	
Condoms	29.75		12.56	29.67	
IUD	13.99	3.67	2.16	2.82	2.94
Injectables	29.71	18.15	9.40	18.29	9.02
Norplant	30.98		10.54	11.13	16.72
Tubal Ligation	13.92		5.75	5.59	3.62

It is also difficult to determine exactly why there is so much variation among cost estimates that, in theory, should be similar. Differences in the way that the studies measured costs are likely to account for much of this variation.

How can we improve cost estimates and provide more useful information for policy decisions?

Cost estimates could be improved if researchers and programs used a standard approach to measuring them.

To calculate comparable cost per CYP figures, cost estimates should include:

- all costs incurred in obtaining a method;
- the costs of continuing to use it; and
- the costs of discontinuing use.

Within each of these categories, there are costs associated with:

- the staff who provide the services;
- any supplies used;
- the contraceptive method itself; and
- the building and equipment.

Many studies exclude some of these costs. For example, contraceptive costs and the costs of follow-up and removal visits for long-acting methods may be ignored. Studies often count only the cost of the visit during which women obtain the IUD or Norplant, yet women who choose these methods must usually return for at least one follow-up visit, as well as a removal visit. Thus, costs per CYP may be underestimated.

The costs of contraceptive commodities are sometimes excluded because they are donated by international agencies and not purchased by the program itself. This underestimates the true cost of providing services. Programs would be forced to pay for contraceptives if donor money were withdrawn.

Finally, labor costs must be accurately measured. The cost of staff labor is often the largest component of total program costs. As such, the way that personnel use their time should be a key question for cost researchers. All staff time, including the time when staff are not seeing clients, should be included. Personnel time should also be measured by activity so that decision makers can evaluate the extent to which clinics are operating with underutilized capacity, or, in other words, the extent to which providers have unused time.

#### **QUESTION #2:**

### Are existing services being used to their fullest potential?

When family planning workers spend a significant amount of time not assisting clients or carrying out other activities, there is underutilized capacity. Staff are being paid for non-productive time, and costs per visit are therefore high. If staff were more fully utilized, more clients could be served without increasing programs' labor costs.

Assessing the amount of underutilized capacity is especially important for the projection of future family planning costs. If demand for family planning rises, as it is expected to in most sub-Saharan African countries, the costs of providing family planning services will rise less if excess capacity is used. The increased number of clients could be absorbed within the existing network of providers, and programs might not be forced to hire significantly more family planning workers or add to

buildings and equipment. In order to determine the extent of unused capacity, programs should conduct cost studies that address this issue and develop practical suggestions to refocus staff attention on direct client services and other productive activities.

#### How can underutilized capacity be mobilized in sub-Saharan Africa?

Work performance must be strengthened in order to reduce underutilized capacity. Two interrelated changes need to take place in order to increase the level of staff work effort: more clients need to demand services, and staff need to spend their time meeting this demand. Financial or technical incentives such as increased salaries or further training can enhance staff productivity, which will improve services and attract more clients. Management and supervisory structures need to encourage better job performance and increased attention to clients.

#### **QUESTION #3:**

### Can the cost of services be reduced without compromising safety?

Some service practices can hinder clients' access to family planning services. Some of these practices may also raise the cost of providing contraceptive services.

### Could some tests and procedures be eliminated without compromising safety?

Some tests and procedures currently required before contraceptives are provided to clients are not necessary. In parts of West Africa, for example, women must have a blood test before they can be prescribed the combined oral contraceptive pill. Though this practice is based on historical concern about liver or cardiovascular disease, such tests are

not recommended or required according to the World Health Organization's (WHO) 1995 guidelines for contraceptive eligibility criteria. <sup>13</sup> Moreover, very few women are actually identified to be at risk through the use of these expensive tests.

In some settings, more follow-up visits than are medically necessary are routinely recommended. For example, at most of WHO's collaborating centers in Africa, pills are only prescribed for two to three months at a time, and IUD users are told to return every four to six months. <sup>14</sup> Studies have shown, however, that more cycles of pills can be safely prescribed, and that fewer IUD follow-up visits are necessary. <sup>15</sup>

These practices not only represent an inconvenience to users, but can add significantly to the costs of service delivery. In Senegal, for example, the cost of the blood tests required for pill prescriptions was estimated in 1989 to be U.S. \$55-\$216, five times the monthly per capita income. A brief oral medical history is usually sufficient to identify those clients at risk of the rare complications of pill use, such as blood clots.

### Can some family planning services be safely provided by non-physicians?

There is a growing body of evidence that shows that many family planning services can be performed equally well by paraprofessional staff, such as nurses or midwives.<sup>17,18,19</sup>

These services include provision of oral contraceptives (OCs) and injectables as well as IUD insertion. These services can be provided by non-physician staff with appropriate training and supervision. Because non-physician staff typically are paid lower salaries than physicians, their use can lower overall program costs without compromising the quality of services or the health of clients.

## What steps need to be taken to introduce or improve guidelines for contraceptive service delivery?

Guidelines that standardize clinical practices have been developed in many countries. When providers adhere to these guidelines, recommended practices are followed and unnecessary practices are minimized. It takes commitment at the national level to develop and reach consensus on service guidelines. While medical professionals may agree that not all currently mandated tests and procedures are necessary, they do not agree on which ones should be maintained or abandoned.<sup>20</sup>

Four key steps should be taken to develop these guidelines:

- 1. current practices should be assessed and obstacles to providing quality services identified;
- 2. consensus on the guidelines should be developed through a participatory process;
- 3. providers should be trained in the use of the guidelines; and
- 4. managers should make sure that the new guidelines are used.

#### **QUESTION #4:**

# What are the costs and benefits of providing reproductive health services along with family planning?

Managing reproductive tract infections, including sexually transmitted diseases

Many family planning programs in sub-Saharan Africa are now diversifying their services to include the management of reproductive tract infections (RTIs) and other reproductive health services. The

provision of more comprehensive reproductive health care will affect costs and funding requirements. Little research has been conducted to examine the cost-effectiveness of integrated programs.

Most urgently, programs need to analyze the costs and cost savings of various RTI screening and treatment strategies for family planning clients. These include:

- laboratory testing and treatment;
- presumptive treatment of all clients;
- risk assessment and syndromic management;
- a combination of the above strategies; and
- no screening or treatment (status quo).

No data are yet available to determine the most cost-effective strategy for managing asymptomatic RTIs, such as chlamydia, among family planning clients in sub-Saharan Africa. The most costeffective strategy depends on the costs and effectiveness of screening and treatment strategies versus the costs associated with failure to treat infected clients. The costs of screening and treatment include those associated with lab tests, risk assessment, or syndromic management, along with the costs of drug treatment. The costs of failing to treat include those associated with clinic or hospital care for pelvic pain, infertility, and other health consequences — for women and men — of untreated RTIs, as well as lost productivity. Costs also depend on incidence; the higher the incidence of RTIs, the higher the future costs of failing to provide early treatment.

Miller (1998) suggests using cost-effectiveness analysis to decide who should receive lab testing. He argues that the only relevant costs to consider are those for lab testing incurred by the organization that provides these services.<sup>21</sup> One possible

strategy is to use lab tests on only those women at moderate risk, empirically treat those women at high risk and not test women who have no or very low risk. This approach needs to be evaluated.

Because lab facilities are scarce in the developing world, and because lab testing is costly, screening strategies that do not rely on lab tests have been considered. Such strategies, known as the syndromic approach to RTI management, generally involve initiating treatment based on symptoms, rather than on a definitive diagnosis. Recently, it has been used, sometimes in combination with risk assessment, for clients at family planning clinics. Unfortunately, recent research suggests that this

approach as it is currently used may not be effective in treating an often asymptomatic cervical infection like chlamydia. For example, a high percentage of women who are treated are not infected. Thus, costs are unnecessarily incurred. Moreover, this approach fails to identify a high percentage of women who are infected (for more information, see Mayaud et al., 1995<sup>22</sup> and Dallabetta et al., 1998<sup>23</sup>).

A number of studies have determined however, that for women who are symptomatic for RTIs, programs that provide both family planning and RTI services during the same visit can reduce costs to both the facility and to the client. <sup>24,25</sup>

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#### About These Policy Briefs

This series of four policy briefs was written by Barbara Janowitz, Diana Measham and Caroline West. It was published by Family Health International with support from the Office of Sustainable Development, Bureau for Africa, U.S. Agency for International Development.

The briefs explore four key issues in the financing of family planning services in sub-Saharan Africa:

- 1) the need for additional funds for family planning in sub-Saharan Africa;
- 2) charging fees for family planning services;
- 3) expanding commercial sector participation in family planning; and
- 4) reducing costs and enhancing efficiency.

For more in-depth information, please request a copy of the 80-page report, "Issues in the Financing of Family Planning Services in Sub-Saharan Africa," from: Publications Coordinator, Family Health International, P.O. Box 13950, Research Triangle Park, NC 27709 USA. The report is also available in full text on FHI's Web site at http://www.fhi.org.